

RECEIVED  
CENTRAL FAX CENTER

AUG 02 2006

REMARKS

The specification is being amended to correct an informality set forth in Section 1 of the Office Action. Claims 1-11 are pending. No new matter is being added.

*Allowable subject matter*

Claim 6 stands objected to as being dependent on a rejected base claim, but would be allowable if placed in independent form. Appreciation is expressed for the indication of allowability of this claim.

*Claim rejections 35 USC § 102*

The Office Action states that Claims 1 and 5 are rejected as being anticipated by Ahn, US Patent No. 6,211,764 (Ahn). The rejection of Claims 1 and 5 is traversed since Ahn does not disclose each and every feature cited in Claim 1. Ahn does not disclose "a predistorter" comprising "input means arranged to apply pre-distorter input signals to a linear path and a non-linear part substantially in relative phase opposition" as recited in Claim 1.

Ahn discloses in Fig. 4 an active distortion signal generation circuit. As is shown in Fig. 2 with reference number 21b, the active distortion signal generation circuit is part of a linearizer (21 in Fig. 2), and more in particular the active distortion signal generation circuit is part of a second, non-linear path (21b and 21c in Fig. 2) of the linearizer, see column 1 ll. 55-56. The active distortion signal generation circuit generates a distorted signal, similar to the distortion incurred in the amplifier, see for example column 1 ll. 31-33. In the non-linear path of the linearizer, the distorted signal is used to generate a counterpart distortion signal, column 1 ll. 50-52. The linearizer includes a combiner (21e in Fig. 2) which combines the counterpart distortion signal with the input signal to remove the distortion component generated by the power amplifier (22 in Fig. 2), see

column 1 ll. 50-54. As can be seen in Fig. 2, this combined signal is inputted to the power amplifier.

Since the active distortion signal generation circuit generates a signal similar to distorted signal, similar to the distortion incurred in the amplifier, if this distorted signal would be inputted to the power amplifier this would enhance the distortion. Thus, the active distortion signal generation circuit does not generate a pre-distorted signal, i.e. a signal which tends to compensate for the distortion of the power amplifier. Accordingly, the active distortion signal generation circuit disclosed in Ahn is not a predistorter.

As is shown in Fig. 2, the active distortion signal generation circuit is part of a second, non-linear path of a linearizer, see column 1 ll. 55-56. In the non-linear path of the linearizer, the output of the active distortion signal generation circuit is inputted to a variable attenuator and variable phase shifter. Hence, the signals outputted by the active distortion signal generation circuit are subject to processing of a non-linear kind in the non-linear path. Thus, although referred to in Ahn as ‘linear’ and ‘non-linear’, both paths 42, 43 of the active distortion signal generation circuit are in fact non-linear.

It should be noted that Ahn is completely silent about a difference in phase between the signals applied to the linear path and the non-linear path of the linearizer 21 or about a difference in phase between the signals outputted by the device 21a .

Accordingly, besides other differences, Ahn does not “a predistorter” including “input means arranged to apply pre-distorter input signals to a linear path and a non-linear part substantially in relative phase opposition” as recited in Claim 1. Accordingly, Ahn does not disclose each and every feature cited in Claim 1.

#### *Claim rejections 35 USC § 103*

The Office Action states that Claims 2-4 and 10 are rejected as being unpatentable over Ahn in view of Quan; that Claims 7-9 are rejected as being unpatentable over Ahn in

view of Gatti, and that Claim 11 is rejected as being unpatentable over Ahn in view of Ghannouchi.

The dependent claims depend from Claim 1, and are allowable for at least that reason.

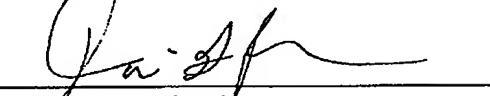
Because of the above, the application is now believed to be in condition for allowance, and the Examiner is cordially invited to issue a notification of allowance.

Respectfully submitted,

SEND CORRESPONDENCE TO:

Freescale Semiconductor, Inc.  
Law Department

Customer Number: 23125

By: 

David G. Dolezal  
Attorney of Record  
Reg. No.: 41,711  
Telephone: (512) 996-6839  
Fax No.: (512) 996-6854